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ANDREWS KURTH LLP
1350 I STREET, N.W.
SUITE 1100
WASHINGTON, DC 20005

EXAMINER

OSMAN, RAMY M

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/613,994
Filing Date: July 08, 2003
Appellant(s): CHEN ET AL.

Sean S Wooden (43,997)
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed May 8, 2008, with subsequent corrections dated 6/2/08, 9/22/08 and 1/9/09, appealing from the Office action mailed August 8, 2007.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement, as submitted on 6/2/08, of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary, as submitted on 1/9/09, of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

WITHDRAWN REJECTIONS

The following grounds of rejection are not presented for review on appeal because they have been withdrawn by the examiner. The 112 second paragraph rejection of claim 1 is now withdrawn by the Examiner.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6,567,893	Challenger et al	5-2003
6,055,364	Speakman et al	4-2000

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1-16,18-24 rejected under 35 U.S.C. 103(a) as being unpatentable over Challenger et al (US Patent No 6,567,893) in view of Speakman et al (US Patent No 6,055,364).**

3. In reference to claim 1, Challenger teaches *a network for distributing digital content to subscribers, comprising:*

a plurality of user machines (Figure 1 and column 3 lines 8 & 17, Challenger discloses clients [11]);

a central distributor that regularly distributes digital content (Figure 1 and column 3 lines 11,13-14 & 41, Challenger discloses Web server [14] for distributing objects (i.e. *digital content*));

a plurality of cache servers that receive and cache the distributed digital content, wherein the cache servers periodically receive user requests from user machines for certain of the cached digital content and forward the requested digital content to the user machines (Figure 1 and column 3 lines 9-10, Challenger discloses proxy servers [12]. The proxy servers receive user requests for cached content (column 3 lines 29-51)); and,

transferring digital content to the plurality of caches servers using a publish-subscribe content-based routing, wherein the digital content files are publications and the user requests are subscriptions (column 3 lines 39-43 7 58-61 and column 4 lines 25-34, Challenger discloses transferring objects to cache servers using a publish subscribe based method. The objects correspond to “*content files are subscriptions*”, while the user/cache requests sent to the web server correspond to “*the user requests are subscriptions*”).

Challenger fails to explicitly teach the claimed routing box, *where the routing box receives the distributed digital content as files from the central distributor and transfers the digital content files to the plurality of cache servers, and wherein the routing box receives a filter and uses the filter to selectively transfer the digital content files to one or more of the plurality of cache servers.*

HOWEVER, Firstly, Challenger does teach communication networks [13] and [15] in Figure 1, in which the networks use conventional Internet routing techniques for communication (column 3 lines 40-43). Internet routing inherently includes routers. Secondly, **Speakman**

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discloses network elements N [140] (i.e. routers) selectively transferring information (i.e. digital content) to recipients R [120] via content-based filtering (figure 1 and column 2 lines 35-42). The recipients [120] subscribe/request information (i.e. digital content) from source servers S [110] (column 4 lines 38-42 & 63-66). Speakman further discloses that network elements [140] receive content descriptors from source [110] (column 4 lines 15-19) and utilize those content descriptors as filters in order to filter the information and provide transmission of the information to the recipients [120] (column 5 lines 1-5 & 37-54). This is performed for the purpose of enabling distribution of varying categories of subscription information to recipients (column 1 lines 39-49)

It would have been obvious for one of ordinary skill in the art to modify Challenger to utilize the routing of Speakman within the communication network [15] of Challenger, wherein a routing box that receives the distributed digital content as files from the central distributor and transfers the digital content files to the plurality of cache servers, and wherein the routing box receives a filter and uses the filter to selectively transfer the digital content files to one or more of the plurality of cache servers as per the teachings of Speakman for the purpose of enabling distribution of varying categories of subscription information to a large number of recipients.

4. In reference to claim 2, Challenger teaches the network of claim 1, wherein the routing box is a first routing box, the network further comprising a second routing box co-located with the plurality of cache servers, wherein the first routing box routs the digital content files to the second routing box co- located with at least one of the plurality of cache servers. (Speakman, see figure 1)

5. In reference to claim 3, Challenger teaches the network of claim 1, wherein the plurality of cache servers are located at a network service provider. (Challenger, column 3 line 40 – column 4 line 15)

6. In reference to claim 4, Challenger teaches the network of claim 1, wherein the plurality of cache servers are a first level of cache servers that store all the digital content distributed by the central distributor. (Challenger, column 3 line 40 – column 4 line 15)

7. In reference to claim 5, Challenger teaches the network of claim 4, further comprising a second level of cache servers that store a portion of the digital content distributed by the central distributor. (Challenger, column 3 line 40 – column 4 line 15)

8. In reference to claim 6, Challenger teaches the network of claim 5, wherein the routing box is a first routing box, the network further comprising a second routing box co-located with the second level of cache servers, wherein the first routing box and the second routing box transfer digital content files from the first level of cache servers to the second level of cache servers using a publish-subscribe content-based routing. (Speakman, see figure 1)

9. In reference to claim 7, Challenger teaches the network of claim 6, wherein each of the routing boxes include: a receive module for receiving a packet having a header section and a payload section, the payload section including information relating to a digital content file; an inspect module for inspecting the payload section of the packet for use in determining how to route the packet; and a route module for selectively routing the packet from the first level of cache servers to the second level of cache servers based upon the inspecting. (Speakman, figure 1 and column 5 lines 5-27 & 37-53)

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10. In reference to claim 8, Challenger teaches the network of claim 5, wherein the portion of the digital content stored by the second level of cache servers is determined based on a history of received user requests. (Challenger, column 5 lines 40-67)

11. In reference to claim 9, Challenger teaches the network of claim 5, wherein the second level of cache servers directly receive the user requests and forward user requests to the first level of cache servers for digital content not stored by the second level of cache servers. (Challenger, column 5 lines 40-67)

12. In reference to claim 10, Challenger teaches the network of claim 1, wherein the routing box includes: a receive module for receiving a packet having a header section and a payload section, the payload section including information relating to a digital content file; an inspect module for inspecting the payload section of the packet for use in determining how to route the packet; and a route module for selectively routing the packet from the central distributor to the plurality of cache servers based upon the inspecting. (Speakman, figure 1 and column 5 lines 5-27 & 37-53)

13. In reference to claim 11, Challenger teaches the network of claim 1, wherein the central distributor comprises one or more servers. (Challenger, column 3 lines 10-14)

14. In reference to claim 12, Challenger teaches the network of claim 1, wherein the digital content includes video, music and software. (Challenger, column 3 lines 10-40)

15. In reference to claims 13-16 and 18-24, Challenger teaches the corresponding method of distributing digital content based on the same rationale presented above for network claims of 1-12. Claims 13-16 and 18-24 are rejected based on the same rationale of the rejections of claims 1-12.

(10) Response to Argument

16. **In argument A.1.**, Appellant argues that “*nothing in Speakman teaches #1. a routing box that receives digital content and transfers the content to cache servers, #2. selectively transferring digital content to cache servers using publish-subscribe based routing and a filter, and #3. a routing box receiving a filter*”.

In response, the Examiner acknowledges that Challenger fails to teach the claimed features of the “routing box”. However, it is an inherent feature of Challenger to have routers within the communication network [15] which are used for traffic between the cache server [12] and web server [14] (Figure 1 and column 3 lines 40-43). Furthermore, Speakman was then used to demonstrate that the routers, within network [15] of Challenger, can be modified to perform content based filtering as described in Speakman. The Speakman citations of column 1 (as mentioned by Appellant), were not referenced in the rejection except for motivation.

Regarding point #1 above, Speakman discloses network elements N [140] (i.e. routers) selectively transferring information (i.e. digital content) to recipients R [120] (figure 1 and column 2 lines 35-42).

Regarding point #2 above, Speakman discloses that the information is transferred via content-based filtering (column 2 lines 35-42) using a publish-subscribe model where the recipients [120] subscribe/request information (i.e. digital content) from source servers S [110] (column 4 lines 38-42 & 63-66). This is consistent with Challengers publish-subscribe model, where objects (i.e. digital content) are transferred to cache servers from web servers, using publish-subscribe (Challenger, column 3 lines 39-43 7 58-61 and column 4 lines 25-34). Speakman also discloses utilizing content descriptors as filters in order to filter the information

and provide transmission of the information to the recipients [120] (Speakman, column 5 lines 1-5 & 37-54).

Regarding point #3 above, Speakman discloses the network elements receiving the content descriptors (i.e. filter) from source [110] (column 4 lines 15-19), in order to filter the information and provide transmission of the information to the recipients [120] (column 5 lines 1-5 & 37-54).

17. **In argument A.2.**, Appellant argues that “*the references fail to describe propagating a filter to a routing box*” and that “*transmitting a content descriptor is not propagating a filter*”.

In response, Speakman discloses that network elements use content descriptors to filter packets of information (i.e. digital content) that are to be transmitted from the source to the recipient (column 5 lines 1-5 & 37-54). The claims recite “*a routing box receives a filter and uses the filter to transfer content...*”. The use of the limitation “filter” is broad and is broadly interpreted as anything which can be used as a filter. In this case, the content descriptors are used for the purpose of filtering, and are thus a filter parameter and thus satisfying the broad limitation of “filter”.

18. **In argument B.**, Appellant argues that claim 1 meets the requirements of 35 USC 112 second paragraph.

In response, Appellants arguments are persuasive and the rejection is thus withdrawn.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner’s answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Ramy M Osman/

Primary Examiner, Art Unit 2457

April 14, 2009

Conferees:

/ARIO ETIENNE/

Supervisory Patent Examiner, Art Unit 2457